Memorandum

To: Board Members Date: April 9, 2003

From: Paul Riches

Legislative Analyst

Subject: Comments on Sterile Compounding

Below is a summary of the comments received during the 45 day comment period on the sterile compounding regulations. Copies of the comments are attached for your reference

In an email sent on April 1, 2003, Mr. Darrell Chan recommends altering the record retrieval standard in Section 1751.3 from "immediately retrievable" to "readily retrievable." Mr. Chan states that this change will ease pharmacy compliance with the regulation and will not reduce patient safety.

In an email dated April 11, 2003, Mr. Mike Koch recommends altering the record retrieval standard in Section 1751.3 from "immediately retrievable" to "readily retrievable." Mr. Chan states that this change will ease pharmacy compliance with the regulation and will not reduce patient safety.

In letters dated March 4, 2003, William Blair and Cynthia Hazelton recommend restricting the added record keeping requirements in Section 1751.3 to patients in long term care facilities or patients monitored by home health care agencies. Mr. Blair states that the records required are unnecessary except in these specific care settings.

In an email dated March 14, 2003, Mr. Joe Grasela supports the position of Mr. Blair.

In an email dated March 12, 2003, Mr. Carl Wiggins suggests that the labels on parenteral solutions in a hospital should not be required to include the pharmacy telephone number. Mr. Wiggins states that this requirement serves no purpose and unnecessarily clutters the label which contains other important information.

In an email dated March 13, 2003, Mr. John Sang comments that the federal standard referenced in the proposed regulation has been superseded by a standard adopted by the

International Standards Organization (ISO). Mr. Sang further comments that if end product testing requirements have been eliminated, then process validation standards should be established to ensure the quality of aseptic technique.

In a letter sent on March 24, 2003, Mr. Gary Bremer recommends altering the record retrieval standard in Section 1751.3 from "immediately retrievable" to "readily retrievable." Mr. Bremer states that this change will ease pharmacy compliance with the regulation and will not reduce patient safety.

In an email dated February 23, 2003, Mr. Ernest Aldama comments that the definition of "barrier isolator" is unclear. Mr. Aldama further comments that the federal cleanliness standard referenced in the regulation has been superseded by a standard adopted by ISO. Mr. Aldama further comments that pharmacy standards published in Title 24 of the California Code of Regulations (CCR) should be published elsewhere in the CCR because Title 24 is not readily available. Mr. Aldama further comments that section 1751.01 (b) it is unclear who will make the required determination when the compounding environment fails to meet pharmacy standards and that most pharmacy personnel do not understand how the environmental control equipment operates. Mr. Aldama further comments that it is unclear what will satisfy the policies and procedures required by 1751.02.

In a letter submitted to the board's Licensing Committee on March 4, 2003, Mr. Michael Pastrick comments that sterility testing of compounded sterile injectable drug products is not supported by current professional guidelines and that it is only appropriate to perform such testing on large batches of sterile injectable drug products compounded from non-sterile ingredients. Mr. Pastrick further comments that microbial testing of compounded sterile injectable drug products should be mandated whenever there is reason to suspect that the compounded drug product has been contaminated.

Paul Riches
Legislative Analyst
CA BOARD of PHARMACY

Dear Mr. Riches,

I recently received a copy of the new draft revisions to Title 16 CCR 1751 et seq.

I spent some time re-typing, to sanitize the changes, and to get a better reading of the document and I have some question and some recommendations on the new changes and additions.

First thing I noticed, is that Section 1751. Sterile Injectable compounding area, there are references to Title 24 and my experience is that this document is not always available to the general industry (e.g. most pharmacy) because it is a proprietary document, it is not at most reference libraries and if this is to be the document applying to Sterile Injectable products, those references should be included somewhere in this statue.

Next in Section 1751.01 there is the call out of classification of cleanrooms and clean air devices. The recent change over by the industry to the new ISO standard somehow make these references out dated as the old classification were to Fed Std 209 which has been abandoned and is not being updated. The reference to a barrier isolator is not defined or is this meant to be an item that is manufactured by one company or can all participants and suppliers of environmental chambers be allowed to submit their designs. The present equipment referred to as biological safety cabinets are barrier isolators. They offer containment of particulate matter that could harbor contaminates and also protect the personnel and the environment by the design of the airflow pattern at the window opening and the HEPA filters. I have talked with some pharmacy personnel and what is presently being referred to as a barrier isolator, is a unit from a manufacturer in Canada.

In (b) how is it to be accomplished. Who is to make that decision?. Where are the references?. Does the pharmacy personnel have the experience to know when the environment fails to meet the criteria?.

My experience in the last 18 years of testing pharmacy equipment that is used, (e.g. laminar flow hood, biological (chemo) hoods and cleanrooms) very few actually know how any of it operates. Sure they know that it must be cleaned with some type of disinfectant, but few know that they must remove the work trays and grilles to clean under the work surface or how the airflow pattern of biological safety cabinets creates a sterile environment, that the HEPA filters only filter out particulate matter not gasses or odors and that they must neutralize and remove from all the surfaces any disinfectant applied not just sprayed and left to dry. Some are corrosive to some surface material like stainless steel, and aluminum where if it is to corrode, particulate matter can enter the air stream and be deposited onto the sterile surface.

In the new Section 1751.02 Policies and Procedures

In Paragraph (c).(3).(F) (G) (I) and (k). who is to determine what constitutes compliances with these items, or are they at the discretion of the pharmacy to develop the procedures.

In the Amended Section 1751.4. Protective Clothing.

Item (c) states that "The requirements of this subdivision do not apply if a barrier isolator is used to compound sterile injectable products from one or more non-sterile ingredients"

My question here is, What constitutes a Barrier Isolator? If we are referring to those that have ports with bulky gloves, my experience is not favorable. In the process of certification, trying to get the gloves on and off is quite difficult. We also noted that open areas, under the units, that we use to bring our lines in, can allow contaminate to enter when the unit is turned off. We also find that the cleaning process can or looks difficult. The way the gloves are designed, a right and left hand glove, with a big band in the middle, using the right one, items are hard to reach in the chamber and your left arm does not turn in such a way as being able to get anything in or out of the pass through chamber.

As a consultant, I am asked, my opinion on the use and type of containment equipment presently used by many pharmacies. Most pharmacist and technicians may know how to compound or have been taught the methods but I can assure you, only a few have been taught the fundamentals of environmental controls and management. How do I know, because I am out there every day doing my job.

My last question is, was it the intent to include those office where cytotoxic drugs are compounded, (e.g. oncology services, doctors offices and home care facilities) or are they excluded.

Now my recommendations. I feel that the addition of appendices to this statute will help in the clarification of those items that I and maybe a few other have and can give definitions, and examples so everyone can be on the same track for compliance and inspection purposes.

Respectfully,

Ernest M. Aldama

owner

Adapt Consulting

March 4, 2003

Paul Riches Legislative Analyst 400 R Street, Suite 4070 Sacramento, CA 95814

Dear Mr. Riches.

I am requesting that the Board of Pharmacy modify **Section 1751.3 Recordkeeping Requirements** of the proposed regulation: Sterile Compounding, Title 16.

The suggested changes are underlined.

Section 1751.3. Recordkeeping Requirements

- (a) In addition to the medication profile required by section 1707.1, pharmacies which compound sterile injectable products for patients in long term care facilities or for patients receiving monitored intravenous therapy in the home setting shall have an immediately retrievable patient profile for each patient being treated with compounded sterile injectable products. The following records shall be maintained when dispensing compounded sterile injectable products for patients in long term care facilities or for patients receiving monitored intravenous therapy in the home setting:
 - (1) Information relevant to the patient's sterile injectable drug therapy shall include but not be limited to:
 - (A) Patient's body weight.
 - (B) Primary diagnosis related to need for prescribed therapy; secondary diagnosis if available.
 - (C) Summary of most recent hospitalization and/or previous history related to the diagnosis for which the sterile injectable drug is prescribed.
 - (2) Progress notes documenting pharmacist contact with the patient or physician relative to compounded sterile injectable therapy.
 - (3) Laboratory data relevant to the pharmacist's management of the patient's treatment with compounded sterile injectable drug therapy.

These modifications will result in a more effective regulation because (1) it will alleviate unnecessary record keeping, and (2) it will continue the required record keeping for patients in long term care facilities and for patients in home care settings as intended when Section 1751.3 was originally adopted.

All pharmacies are required to maintain medication profiles as specified in Section 1707.1. This is appropriate and is sufficient for all patients except those in long term care facilities and in home care settings.

Section 1751.3 was written originally to require additional record keeping for patients in long term care facilities and for patients in home care settings.

The proposed Section 1751.3 expands this additional record keeping to all patients, not just for patients in long term care facilities and for patients in home care settings. This is unnecessary and unattainable. Consequently, California patients will be denied critically needed compounded sterile injectables.

To place the proposed record keeping requirements in perspective, imagine what would happen to the health and well being of California citizens if the same record keeping were required for all medications. What would happen if a patient were to bring in a prescription to a retail pharmacy for Thyroid tablets, and a pharmacist needed to maintain the following records?

- (A) Patient's body weight.
- (B) Primary diagnosis related to need for prescribed therapy; secondary diagnosis if available.
- (C) Summary of most recent hospitalization and/or previous history related to the diagnosis for which the drug is prescribed.
- (D) Progress notes documenting pharmacist contact with the patient or physician.
- (E) Laboratory data relevant to the pharmacist's management of the

patient's treatment with drug therapy.

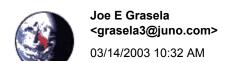
Patients would not be able to obtain their medications.

In summary, I am urging adoption of the modification elicited above to the proposed **Section 1751.3 Recordkeeping Requirements**. These modifications simply state that the additional record keeping is still required for patients in long term care facilities and for patients receiving monitored intravenous therapy in the home setting, but it is not required for other patients.

Very best wishes,

McGuff Compounding Pharmacy Services, Inc.

William J. Blair, Pharm. D., MBA Director of Pharmacy Services



To: Paul_Riches@dca.ca.gov cc:

Subject: Re: Sterile Compounding Regulations

the same problem exists. the record keeping will not be possible. when this law was written many years ago it was directed to hospitals and home health care agencies that have access to this information. times have changed and hospitals and home health care agencies have this information in order to be accredited. so this part of the law is obsolete. what is wrong with bill blairs suggestion?????

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On Wed, 12 Mar 2003 16:52:20 -0800 Paul_Riches@dca.ca.gov writes:

> Just a reminder that the new draft of the sterile compounding

> regulations

> is available for public comment. The draft is attached for your

> reference.

> Please address any comments back to the board before the April 29,

> 2003

> hearing the board will have on this proposed regulations.

> (See attached file: Regulation Text.pdf)

> Paul Riches, Legislative Analyst

> CA Board of Pharmacy

> (916) 445-5014 ext. 4016
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March 4, 2003

Paul Riches Legislative Analyst 400 R Street, Suite 4070 Sacramento, CA 95814

Dear Mr. Riches,

I am requesting that the Board of Pharmacy modify **Section 1751.3 Recordkeeping Requirements** of the proposed regulation: Sterile Compounding, Title 16.

The suggested changes are underlined, and contain only slight modification of those changes proposed by Dr. Blair of McGuff Compounding Pharmacy Services, Inc.

Section 1751.3. Recordkeeping Requirements

- (a) In addition to the medication profile required by section 1707.1, pharmacies which compound sterile injectable products for patients in long term care facilities or for patients receiving monitored intravenous therapy in the home setting shall ensure maintenance of a readily retrievable patient profile for each patient being treated with compounded sterile injectable products. The following records shall be maintained when dispensing compounded sterile injectable products for patients in long term care facilities or for patients receiving monitored intravenous therapy in the home setting:
 - (1) Information relevant to the patient's sterile injectable drug therapy shall include but not be limited to:
 - (A) Patient's body weight.
 - (B) Primary diagnosis related to need for prescribed therapy; secondary diagnosis if available.
 - (C) Summary of most recent hospitalization and/or previous history related to the diagnosis for which the sterile injectable drug is prescribed.
 - (2) Progress notes documenting pharmacist contact with the patient or physician relative to compounded sterile injectable therapy.
 - (3) Laboratory data relevant to the pharmacist's management of the patient's treatment with compounded sterile injectable drug therapy.

These modifications will result in a more effective regulation because (1) it will alleviate unnecessary record keeping, and (2) it will continue the required record keeping for patients in long term care facilities and for patients in home care settings as intended when Section 1751.3 was originally adopted.

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Section 1751.3 was written originally to require additional record keeping for patients in long term care facilities and for patients in home care settings.

The proposed Section 1751.3 expands this additional record keeping to all patients, not just for patients in long term care facilities and for patients in home care settings. This is unnecessary and unattainable. Consequently, California patients will be denied critically needed compounded sterile injectables.

To place the proposed record keeping requirements in perspective, imagine what would happen to the health and well being of California citizens if the same record keeping were required for all medications. What would happen if a patient were to bring in a prescription to a retail pharmacy for Thyroid tablets, and a pharmacist needed to maintain the following records?

- (A) Patient's body weight.
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- (C) Summary of most recent hospitalization and/or previous history related to the diagnosis for which the drug is prescribed.
- (D) Progress notes documenting pharmacist contact with the patient or physician.
- (E) Laboratory data relevant to the pharmacist's management of the patient's treatment with drug therapy.

Patients would not be able to obtain their medications.

In summary, I am urging adoption of the modification elicited above to the proposed **Section 1751.3 Recordkeeping Requirements**. These modifications simply state that the additional record keeping is still required for patients in long term care facilities and for patients receiving monitored intravenous therapy in the home setting, but it is not required for other patients.

Very best wishes,

Raphael Pharmacy

Cynthia L. Hazelton Pharmacist-in-Charge

2525 McGaw Ave. Irvine, CA 92614-5895 April 14, 2003

Paul Riches Legislative Analyst 400 R Street, Suite 4070 Sacramento, CA 95814

Dear Mr. Riches,

We request that the Board of Pharmacy consider modifying Section 1751.3 Record Keeping Requirements of the newly updated California Code of Regulations (CCR), Title 16, Article 7: Sterile Injectable Compounding. The proposed change is underlined below.

Section 1751.3. Record Keeping Requirements

- (a) In addition to the medication profile required by section 1707.1, pharmacies which compound sterile injectable products shall have an immediately retrievable patient profile for each patient being treated with compounded sterile injectable products. The following records shall be maintained when dispensing compounded sterile injectable products:
 - (1) Information relevant to the patient's sterile injectable drug therapy shall include but not be limited to:
 - (A) Patient's body weight.
 - (B) Primary diagnosis related to need for prescribed therapy; secondary diagnosis if available.
 - (C) Summary of most recent hospitalization and/or previous history related to the diagnosis for which the sterile injectable drug is prescribed.
 - (2) Progress notes documenting pharmacist contact with the patient or physician relative to compounded sterile injectable therapy.
 - (3) Laboratory data relevant to the pharmacist's management of the patient's treatment with compounded sterile injectable drug therapy.
- (b) The requirements of subdivision (a) do not apply to a non-hospital or a non-home infusion sterile injectable compounding pharmacy that provides products for patients monitored by hospitals or home infusion pharmacies. Under such circumstances, patient profiles shall be readily retrievable for the sterile injectable compounding pharmacy.

This modification will continue to support the proposal for better record keeping; however, it will limit redundancy and not hinder efficiency. The time necessary for obtaining primary

diagnosis, previous history, and laboratory data may be better spent in safely compounding sterile injectable products for patients. Furthermore, such information would be redundant if a contracted hospital or home infusion facility is already maintaining and monitoring the same detailed records.

"Readily retrievable" will allow a pharmacy enough time to contact the contracted institutions to obtain records if and when they are needed. Currently, "readily retrievable" and not "immediately retrievable" records are the standard practices for "dangerous drugs" (that is, drugs that require a prescription) and controlled substances according to Article 6, Section 4105 and Article 7, Section 4112 of the California Pharmacy Law, Business and Professions Code, Chapter 9, Division 2; Title 16, Article 2, Section 1707.1 of the CCR; and Article 5, Section 11206 of the Health and Safety Code, Division 10: Uniform Controlled Substance Act.

"Immediately retrievable" cannot be found in those sections of the three regulatory codes mentioned. Having these additional records "immediately retrievable" as opposed to "readily retrievable" offers no enhancement to patient care or prescription safety. Further, in the case of hospital or homecare patients where other pharmacists are already monitoring drug therapy and maintaining profiles this additional record keeping burden is superfluous. Therefore, it would be more efficient and less redundant for these sterile injectable compounding pharmacies to have "readily retrievable," instead of "immediately retrievable," patient profiles.

We hope that the proposed change to Section 1751.3 Record Keeping Requirements will be adopted. The modification will enhance the quality of pharmacy practice rather than eliminate any requirements pertaining to record keeping.

Sincerely,

Michael Koch R.Ph., MBA
Director of Regional Pharmacy Operations, West
Central Admixture Pharmacy Services

Tel: 949-660-2701 Fax: 240-358-1058

Mail: mike.koch@bbraun.com

Michael A. Pastrick

4086 Poplar Avenue Concord, CA 94521 (925) 798-9728

January 22, 2003

California Board of Pharmacy Attn: Paul Riches 400 R Street, Suite 4070 Sacramento, CA 95814-6237

Re: Proposed revisions to Title 16 CCR 1751 et seq. (Sterile Compounding)

Dear President Jones and Members of the Board,

I apologize for not being able to attend today's hearing. I appreciate the Board allowing me to present this written testimony for your consideration in lieu of my attendance today.

First, I would like to thank the Board for continuing the consideration of revisions to Title 16 CCR 1751 et seq. (Sterile Compounding) to today's hearing and for providing an opportunity for interested parties to discuss the proposed standards at the Licensing Committee meeting of December 5, 2002.

Under the leadership of Board Members Steve Litsey, David Fong and Clarence Hiura, we were able to hold frank discussions and come to general agreement on most, if not all of the issues raised at the previous hearing. I would also like to thank your staff for their thorough consideration of the issues discussed, assistance in identifying additional issues of concern, and for the effort put forth in preparing the draft regulations you are reviewing today.

While I am in agreement with the majority of the proposed regulation changes, I would like to offer comment on the following section.

Section 1751.7 Quality Assurance – Periodic Sampling

Section (a) requires that the end product be *examined* on a periodic sampling basis to assure that it meets required specifications.

Section (a)(2) requires written documentation that the end product has been *tested* on a periodic sampling basis for microbial contamination and steps taken in the event that testing for contamination proves positive.

As proposed, (a)(2) applies to the preparation of <u>all</u> sterile injectable products, not just those products prepared from non-sterile ingredients. I am concerned that a requirement for periodic sampling for microbial contamination will leave a false impression that there is some scientific validity to this type of testing method for those products which come under Risk Level 1 and 2 under the ASHP Guidelines or Low and Medium Risk Levels in the proposed revision to the United States Pharmacopeia 26.

I draw your attention to the discussion of this issue in "Principles of Sterile Product Preparation", Revised 1st Edition, 2002; Buchanan et al, American Society of Health-System Pharmacists, page 126. Under the heading "Microbial Testing", the authors state:

"For years, pharmacists have attempted to use end-product sterility testing (microbial testing) for quality control. Nevertheless, this technique has a limited role in the ongoing evaluation of IV admixtures because

- The sample size is not large enough for a statistical evaluation. Typically, only a few dosage forms of identical content are prepared. For statistically valid sample sizes, all doses in a small batch would have to be tested. This requirement is obviously impractical in a practice setting.
- 2. Numerous processes are involved. Many different drugs, base solutions, and volumes are used in patient-specific IV admixtures. Sterility testing based on sample size requires that samples come from identical products.
- 3. The testing of purportedly sterile products involves aseptic processing itself, creating the potential for contamination (adventitious contamination). Each time a sterile product is manipulated, it can become contaminated.

Despite these limitations, microbial testing has two roles in a sterile product preparation program:

Testing of products suspected of contamination.

Testing of batch-produced products that are quarantined before use."

As you can see from the above discussion, the authors do recognize the importance of sterility testing for batch-produced products that are quarantined before use – typically products prepared from non-sterile ingredients.

The ASHP Guidelines also recognize these important facts. The ASHP Guidelines for Risk Level 1 and 2 products recognize process validation (process simulation) as an acceptable method to assess the adequacy of aseptic technique – i.e., the <u>maintenance</u> of sterility during the preparation of sterile injectables. (RL 1.7, 2.7 Process Validation) Likewise, the ASHP Guidelines recognize the importance of end product examination (evaluation) for determining the accuracy of the compounded product as called for in Section 1751.7(a). (RL 1.10, 2.10 End-Product Evaluation)

I request that the language of Section 1751.7 (a)(2) be amended to read:

"For non-batch prepared sterile injectable products compounded from one or more non-sterile ingredients, written documentation that the end product has been tested on a periodic sampling basis for microbial contamination and steps taken in the event that testing for contamination proves positive."

In keeping with the comments made by Board Member Litsey at the December 5th meeting as he led the discussion on this issue, this amendment, or similar language, would allow for the preparation of a single product that by its very nature does not lend itself to end product testing. For products batch prepared from non-sterile ingredients Sections 1751.02(c)(3) (I), (J), (K) and (L) would require the development of Policies and Procedures that result in sterile end-products.

In recognition of the importance of the testing of products suspected of contamination, I also request that you add a new section 1751.7(a)(6) to the requirements of the Quality Assurance Program.

"The microbial testing of products suspected of contamination."

During the Licensing Committee meeting of December 5, 2002 your staff asked an important policy question – What has changed in the intervening years since the adoption of regulation 1751.7 that merits a change away from microbial testing on a sampling basis?

Quite frankly, a large body of literature has been developed since the time the original regulation was being drafted and adopted (1985-1986). Since that time, our knowledge base has grown. In 1985-86, there was no guidance available to us from such recognized sources as the USP (21st Edition, 1985) or Remington's Pharmaceutical Sciences (16th ed., 1980 and 17th ed., 1985). Turco and King's book, Sterile Dosage Forms (1st ed., 1974 and 2nd ed., 1979) did not discuss such sampling as it applied to hospital or home IV therapy practice. In fact, 104 of the 127 references cited in the ASHP Guidelines were published after 1986.

In the intervening 18 years much has been learned. As demonstrated in the ASHP Guidelines, the proposed revision to USP 26 and the Principles of Sterile Product Preparation, Revised 1st edition quoted above, sampling for microbial testing has only a very limited role in the preparation of low risk level sterile injectables. Of the eleven references in the ASHP Guidelines regarding sampling for microbial testing, they are all cited in reference to programs for end-product sterility testing, according to a formal

sampling plan, for Risk Level 3 products prepared from one or more non-sterile ingredients (RL 3.10)

I appreciate the opportunity to present this testimony at today's hearing and I appreciate your consideration of my comments. I would again like to thank Board Members Litsey, Fong and Hiura, as well as your staff, for their valuable contributions to these proposed regulations.

Sincerely yours,

Jula (A)t

Michael A. Pastrick, Pharmacist



john_sang@baxter.co m

03/13/2003 01:25 PM

To: paul_riches@dca.ca.gov

CC:

Subject: Sterile compounding comments

Paul

Here are some comments that I have regarding the latest draft.

1. Fed 209E is superceded by ISO 14644-1

2. In the section for sterile compounding with sterile starting materials, have the requirements for end product testing been eliminated? If they have, I would recommend process validation as a means to monitor operator's aseptic techniques instead of end product testing. End product testing will give false negative results when used to test antibiotics due to the high concentration of antibiotic in the end product solution.

Please feel free to contact me with any questions or concerns. My number is 323-226-4720.

Thank you

John Sang



cc: Subject: Revision of CCR 1751.02(g)(1)A)

To: Paul Riches@dca.ca.gov, Virginia Herold@dca.ca.gov

03/12/2003 02:26 PM

I understand there are hearings scheduled for this regulation on April 29th. This regulation states that the labeling for parenteral solutions requires a pharmacy telephone number.

While this certainly makes sense for a pharmacy who dispenses to non-resident patients, for hospitaized patients, it does not. The parenteral solutions are administered by nurses, not by patients, and nurses do not need the telephone number on the label in order to call the pharmacy.

Furthermore, parenteral solution labels contain lots of important information that the nurse uses to safely administer the medication. The addition of the telephone number adds one more piece of information to look at, diluting the importance of information necessary for safe administration.

Therefore, I feel there are two reasons to exempt hospital pharmacies from this regulation.

- 1. It does not serve a purpose,
- 2. It poses a safety problem by adding unecessary clutter to the label.

Since I will not be able to attend the hearing, I would appreciate it if you would bring these concerns to that meeting.

Thank you,

Carl A. Wiggins, R.Ph. Director of Pharmacy Sutter Lakeside Hospital 5176 Hill Rd. East Lakeport, CA 95453 (707) 262-5061

Board of Pharmacy Proposed Revisions to Title 16 CCR 1751 et seq.

Article 7. Sterile **Injectable** Compounding

Amend Section 1751. Sterile Injectable Compounding Area for Parenteral Solutions

- (a) The pharmacy shall have a designated area for the preparation of sterile <u>injectable</u> products for dispensing which shall <u>meet the following standards:</u>
 - a. (1) Clean Room and Work Station Requirements, shall be in accordance with Section 490A.7.1 490A.3.1 of Title 24 of the California Code of Regulations.
 - b. (2) Walls, ceilings, and floors shall be have cleanable, nonporous surfaces and be constructed in accordance with Section 490A.7.2 of Title 24 of the California Code of Regulations.
 - e. (3) Be ventilated in a manner in accordance with Section 505.11 505.12 of Title 24 of the California Code of Regulations.
 - d. (4) Be certified annually by a qualified technician who is familiar with the methods and procedures for certifying laminar air flow hoods and clean room requirements, in accordance with standards adopted by the Federal Standard 209(b), Clean Room and Work Station Requirements, Controlled Environment, as approved by the Commission, Federal Supply Service, United States General Services Administration. , as amended May 30, 1976 (available from the U.S. General Services Administration, Specifications Activity, Printed Materials Supply Division, Building 197, Naval Weapons Plant, Washington, D.C. 20407). Certification records must be retained for at least 3 years.
 - e. (5) The pharmacy shall be arranged in accordance with Section 490A.7.3 490A.3 of Title 24 of the California Code of Regulations. Items related to the compounding of sterile injectable products parenteral solutions within the compounding area may not be stored in corrugated cardboard boxes and shall be stored in such a way as to maintain the integrity of an aseptic environment.
 - f. (6) A sink with hot and cold running water shall be in accordance in Section 490A.7.4 490A.3.4 of Title 24 of the California Code of Regulations.
 - g. (7) There shall be a refrigerator and/or freezer of sufficient capacity to meet the storage requirements for all material requiring refrigeration.

NOTE

Authority cited: Section 4005, Business and Professions Code.

Reference: Section 4005, Business and Professions Code; and Section 18944(a), Health and Safety Code.

Add Section <u>1751.01 Facility and Equipment Standards for Sterile Injectable</u> Compounding from Non-Sterile Ingredients

- (a) On and after January 1, 2005 this subdivision shall apply to any pharmacy compounding sterile injectable products from one or more non-sterile ingredients. The aseptic processing of such products shall occur in one of the following environments:
 - (1) A class 100 laminar airflow hood within a class 10,000 cleanroom. The cleanroom must have a positive air pressure differential relative to adjacent areas.
 - (2) A class 100 cleanroom. The cleanroom must have a positive air pressure differential relative to adjacent areas.
 - (3) A barrier isolator that provides a class 100 environment for compounding.
- (b) No sterile injectable product shall be prepared if it is known, or reasonably should be known, that the compounding environment fails to meet criteria specified in the pharmacy's written policies and procedures for the safe compounding of sterile injectable drug products.
- (c) During the preparation of sterile injectable products, access to the designated area or cleanroom must be limited to those individuals who are properly attired.
- (d) All equipment used in the designated area or cleanroom must be made of a material that can be easily cleaned and disinfected.
- (e) Exterior workbench surfaces and other hard surfaces in the designated area, such as walls, floors, ceilings, shelves, tables, and stools, must be disinfected weekly and after any unanticipated event that could increase the risk of contamination.

NOTE

Authority cited: Section 4005, Business and Professions Code. Reference: Section 4005, Business and Professions Code; and Section 18944(a), Health and Safety Code.

Add Section 1751.02. Policies and Procedures

- (a) Written policies and procedures associated with the pharmacy's preparation and dispensing of sterile injectable products shall include, but not be limited to:
 - (1) Compounding, filling, and labeling of sterile injectable compounds..
 - (2) Labeling of the sterile injectable product based on the intended route of administration and recommended rate of administration.
 - (3) Equipment and supplies.
 - (4) Training of staff in the preparation of sterile injectable products.
 - (5) Procedures for handling cytotoxic agents.
 - (6) Quality assurance program.
 - (7) Record keeping requirements.
- (b) The ingredients and the compounding process for each preparation must be determined in writing before compounding begins and must be reviewed by a pharmacist.
- (c) Pharmacies compounding sterile injectable products from one or more non-sterile ingredients must have written policies and procedures that comply with the following:
 - (1) Immediately available to all personnel involved in these activities and board inspectors.
 - (2) All personnel involved must read the policies and procedures before compounding sterile injectable products, and any additions, revisions, and deletions to the written

policies and procedures must be communicated to all personnel involved in sterile compounding.

- (3) Policies and procedures must address at least the following:
 - (A) Competency evaluation.
 - (B) Storage and handling of products and supplies.
 - (C) Storage and delivery of final products.
 - (D) Process validation.
 - (E) Personnel access and movement of materials into and near the controlled area.
 - (F) Use and maintenance of environmental control devices used to create the critical area for manipulation of sterile products (e.g., laminar-airflow workstations, biological safety cabinets, class 100 cleanrooms, and barrier isolator workstations).
 - (G) Regular cleaning schedule for the controlled area and any equipment in the controlled area and the alternation of disinfectants. Pharmacies subject to an institutional infection control policy may follow that policy as it relates to cleaning schedules and the alternation of disinfectants in lieu of complying with this subdivision.
 - (H) Disposal of packaging materials, used syringes, containers, and needles to enhance sanitation and avoid accumulation in the controlled area.
 - (I) For sterile batch compounding, written policies and procedures must be established for the use of master formulas and work sheets and for appropriate documentation.
 - (J) Sterilization.
 - (K) End-product evaluation and testing.

NOTE

Authority cited: Section 4005, Business and Professions Code. Reference: Section 4005, Business and Professions Code.

Amend Section 1751.2. Labeling Requirements

In addition to existing labeling requirements, a pharmacy which compounds <u>sterile</u> parenteral injectable products shall include the following information on the labels for those products:

- a. Telephone number of the pharmacy, except for sterile injectable products dispensed for inpatients of a hospital pharmacy.
- b. Name and concentrations of all ingredients contained in the <u>sterile injectable parenteral</u> product including primary solution.
- c. Instructions for storage and handling.
- d. All cytotoxic agents shall bear a special label which states "Chemotherapy-Dispose of Properly."

NOTE

Authority cited: Section 4005, Business and Professions Code. Reference: Section 4005, Business and Professions Code.

Amend Section 1751.3. Record keeping Requirements

- (a) In addition to the medication profile required by section 1707.1, pharmacies Pharmacies which both compound sterile injectable products parenteral solutions and dispense those solutions shall have on the premises or readily accessible an immediately retrievable patient profile record for each patient being treated with compounded sterile injectable products with parenteral therapy. In addition to existing record keeping requirements, the The following records shall be maintained when dispensing compounded sterile injectable products:
 - (a) Records of furnishing of all prescriptions and medical supplies;
 - (b) (1) Information relevant to the patient's parenteral sterile injectable drug therapy shall include but not be limited to:
 - (1) (A) Patient's body weight.
 - (2) (B) Primary diagnosis related to need for prescribed therapy; secondary diagnosis if available.
 - (3) (C) Summary of most recent hospitalization and/or previous history <u>related to</u> the diagnosis for which the sterile injectable drug is prescribed.
 - (4) Medication history, including current diet/medication regimen and drug/food allergies.
 - (e) (2) Progress notes documenting <u>pharmacist</u> contact with the patient or physician relative to <u>compounded sterile injectable drug parenteral</u> therapy.
 - (d) (3) Laboratory data relevant to the pharmacist's management of the patient's treatment with compounded sterile injectable drug parenteral therapy.
- (b) Pharmacies compounding sterile injectable products for future use pursuant to section 1716.1 shall, in addition to those records required by section 1716.2, have records indicating the name, lot number, amount, and date on which the products were provided to a prescriber.
- (c) In addition to the records required by subdivisions (a) and (b), for sterile products compounded from one or more non-sterile ingredients the following records must be maintained for at least three years:
 - (1) The training and competency evaluation of employees in sterile product procedures.
 - (2) Refrigerator and freezer temperatures.
 - (3) Certification of the sterile compounding environment.
 - (4) Other facility quality control logs specific to the pharmacy's policies and procedures (e.g., cleaning logs for facilities and equipment).
 - (5) Inspection for expired or recalled pharmaceutical products or raw ingredients.
 - (6) Preparation records including the master work sheet, the preparation work sheet, and records of end-product evaluation results.

NOTE

Authority cited: Section 4005, Business and Professions Code. Reference: Section 4005, Business and Professions Code.

Amend Section 1751.4. Protective Clothing Attire

(a) When preparing cytotoxic agents, gowns and gloves shall be worn.

- (b) When compounding sterile products from one or more non-sterile ingredients the following standards must be met:
 - (1) Cleanroom garb consisting of a low-shedding coverall, head cover, face mask, and shoe covers must be worn inside the designated area at all times.
 - (2) Cleanroom garb must be donned and removed outside the designated area.
 - (3) Hand, finger, and wrist jewelry must be eliminated. If jewelry cannot be removed then it must be thoroughly cleaned and covered with a sterile glove.
 - (4) Head and facial hair must be kept out of the critical area or be covered.
 - (5) Gloves made of low-shedding materials are required.
- (c) The requirements of this subdivision do not apply if a barrier isolator is used to compound sterile injectable products from one or more non-sterile ingredients.

NOTE

Authority cited: Section 4005, Business and Professions Code. Reference: Section 4005, Business and Professions Code.

Amend Section 1751.5. Training of Staff, Patient, and Caregiver

- (a) Consultation shall be available to the patient and/or primary caregiver concerning proper use of parenterals sterile injectable products and related supplies furnished by the pharmacy.
- (b) The pharmacist in charge shall be responsible to ensure all pharmacy personnel engaging in compounding sterile injectable drug products parenteral solutions shall have training and demonstrated competence in the safe handling and compounding of sterile injectable products, parenteral solutions including cytotoxic agents if the pharmacy compounds products with cytotoxic agents.
- (c) Records of training and demonstrated competence shall be available for each individual and shall be retained for three years beyond the period of employment.
- (d) The pharmacist-in-charge shall be responsible to <u>insure ensure</u> the continuing competence of pharmacy personnel engaged in compounding <u>sterile injectable products</u> parenteral solutions.
- (e) Pharmacies that compound sterile products from one or more non-sterile ingredients must comply with the following training requirements:
 - 1) The pharmacy must establish and follow a written program of training and performance evaluation designed to ensure that each person working in the designated area has the knowledge and skills necessary to perform their assigned tasks properly. This program of training and performance evaluation must address at least the following:
 - (A) Aseptic technique.
 - (B) Pharmaceutical calculations and terminology.
 - (C) Sterile product compounding documentation.
 - (D) Quality assurance procedures.
 - (E) Aseptic preparation procedures.
 - (F) Proper gowning and gloving technique.
 - (G) General conduct in the controlled area.
 - (H) Cleaning, sanitizing, and maintaining equipment used in the controlled area.
 - (I) Sterilization techniques.

- (J) Container, equipment, and closure system selection.
- (2) Each person assigned to the controlled area must successfully complete practical skills training in aseptic technique and aseptic area practices. Evaluation must include written testing and a written protocol of periodic routine performance checks involving adherence to aseptic area policies and procedures. Each person's proficiency and continuing training needs must be reassessed every 12 months. Results of these assessments must be documented and retained in the pharmacy for three years.

NOTE

Authority cited: Section 4005, Business and Professions Code. Reference: Section 4005, Business and Professions Code.

Amend Section 1751.6. Disposal of Waste Material

Pharmacies providing parenteral services compounding sterile injectable products shall have written policies and procedures for the disposal of infectious materials and/or materials containing cytotoxic residues. The procedures shall include cleanup of spills and shall be in conformance with local health jurisdiction. The pharmacy shall ensure the return of such materials or shall communicate the proper destruction of such materials to the caregiver.

NOTE

Authority cited: Section 4005, Business and Professions Code. Reference: Section 4005, Business and Professions Code.

Amend Section 1751.7. Quality Assurance and Process Validation

- (a) There shall be a documented, ongoing quality assurance program that monitors personnel performance, equipment, and facilities. The end product shall be examined on a <u>periodic</u> sampling basis as determined by the pharmacist in charge to assure that it meets required specifications. The Quality Assurance Program shall include at least the following:
 - a. (1) Cleaning and sanitization of the parenteral medication preparation area.
 - b. (2) Written documentation that the end product has been tested on a <u>periodic</u> sampling basis for microbial contamination and steps taken in the event that testing for contamination proves positive.
 - e. If manufacturing of parenteral products is performed using nonsterile chemicals, extensive end product testing must be documented prior to the release of product from quarantine. This process must include testing for sterility and pyrogens.
 - d. (3) The storage of compounded parenteral products in the pharmacy and periodic documentation of refrigerator temperature.
 - e. (4) Steps to be taken in the event of a drug recall.
 - £. (5) Written justification of the chosen expiration dates for compounded parenteral products.
- (b) Each individual involved in the preparation of sterile injectable products from one or more non-sterile ingredients must successfully complete a validation process before being allowed to

prepare sterile products. The validation process shall be carried out in the same manner as normal production, except that an appropriate microbiological growth medium is used to test the sterility of a final product. The same personnel, procedures, equipment, and materials are involved. Completed medium samples must be incubated. If microbial growth is detected, then the sterile preparation process must be evaluated, corrective action taken, and the validation process repeated. Personnel competency must be revalidated at least every twelve months, whenever the quality assurance program yields an unacceptable result, or whenever improper aseptic techniques are observed. Revalidation must be documented.

NOTE

Authority cited: Section 4005, Business and Professions Code. Reference: Section 4005, Business and Professions Code.

Repeal Section 1751.8. Policies and Procedures

Authority cited: Section 4005, Business and Professions Code. Reference: Section 4005, Business and Professions Code.

Amend Section 1751.9. Reference Materials

There shall be current <u>and appropriate</u> reference materials <u>regarding the compounding of sterile</u> <u>injectable products</u> located in or immediately available to the pharmacy.

Such references shall include information on:

- a. The drugs and chemicals used in parenteral therapy services and
- b. All parenteral therapy, manufacturing, dispensing, distribution, and counseling services provided.

NOTE

Authority cited: Section 4005, Business and Professions Code. Reference: Section 4005, Business and Professions Code.